3. ☑ The drawings filed on 07 July 2003 are accepted by the Examiner. 4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☐ All b) ☐ Some* c) ☐ None of the: 1. ☐ Certified copies of the priority documents have been received. 2. ☐ Certified copies of the priority documents have been received in Application No			- Mc
Notice of Allowability		Application No.	Applicant(s)
David S Blum David S Blum 2813 The MAILING DATE of this communication appears on the cover sheet with the correspondence address All claims being allowable. PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed). a Notice of Novamance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiation of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. 1. ☑ This communication is responsive to 77/03. 2. ☑ The allowed claim(s) is/are 1-16. 3. ☑ The drawings filed on 07 July 2003 are accepted by the Examiner. 4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☐ All ☐ b) ☐ Some* o) ☐ None of the: 1. ☐ Certified copies of the priority documents have been received. 2. ☐ Certified copies of the priority documents have been received in Application No. 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). * Certified copies not received:	Notice of Allowability		
The MAILING DATE of this communication appears on the cover sheet with the correspondence address- All claims being allowable. PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not include herewith (or previously malled). a Notice of Nouvance (PTOL-85) or other apporpriate communication will be malled in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiation of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. 1. ☑ This communication is responsive to 77/03. 2. ☑ The allowed claim(s) is/are 1-16. 3. ☑ The drawings filed on 07 1/1/1/2003 are accepted by the Examiner. 4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☐ All b) ☐ Some* c) ☐ None of the: 1. ☐ Certified copies of the priority documents have been received. 2. ☐ Certified copies of the priority documents have been received in Application No 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). *Certified copies not received: Applicant has THREE MONTHS FROM THE *MAILING DATE* of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. (a) ☐ including changes required by the Notice of Draftsporson's Patent Drawing Review (PTO-948) attached 1) ☐ hereto or 2) ☐ to Paper No./Mail Date Drawing Statement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). This Paper No./Mail Date ☐ 1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1		Examiner	Art Unit
All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed, a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiation of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. 1. ☑ This communication is responsive to 万万03. 2. ☑ The allowed claim(s) is/are 1-16. 3. ☑ The drawings filed on 07 July 2003 are accepted by the Examiner. 4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☐ All b) ☐ Some* c) ☐ None of the: 1. ☐ Certified copies of the priority documents have been received. 2. ☐ Certified copies of the priority documents have been received in Application No 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). 4. Certified copies not received: Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. 5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. ☐ Notice of Informal Pat		David S Blum	2813
2. ☑ The allowed claim(s) is/are 1_16. 3. ☑ The drawings filed on 07 July 2003 are accepted by the Examiner. 4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☐ All b) ☐ Some* o) ☐ None of the: 1. ☐ Certified copies of the priority documents have been received. 2. ☐ Certified copies of the priority documents have been received in Application No 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). * Certified copies not received: Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. *THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.* 5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) ☐ Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached: 1) ☐ hereto or 2) ☐ to Paper No./Mail Date	All claims being allowable, PROSECUTION ON THE MERITS herewith (or previously mailed), a Notice of Allowance (PTOL-8 NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT	IS (OR REMAINS) CLOSED in 85) or other appropriate commer RIGHTS . This application is	in this application. If not included nunication will be mailed in due course. THIS
3. ☑ The drawings filed on 07 July 2003 are accepted by the Examiner. 4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☐ All b) ☐ Some* c) ☐ None of the: 1. ☐ Certified copies of the priority documents have been received. 2. ☐ Certified copies of the priority documents have been received in Application No	1. \boxtimes This communication is responsive to $7/7/03$.		
4.	2. ☑ The allowed claim(s) is/are <u>1-16</u> .		
a)	3. The drawings filed on <u>07 July 2003</u> are accepted by the	Examiner.	
International Bureau (PCT Rule 17.2(a)). * Certified copies not received: Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) ☐ hereto or 2) ☐ to Paper No./Mail Date (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date / TO. Section of Paper No. Mail Date / TO. Section of Paper No. Mail Date / TO. Section of Paper No./Mail Date / TO. Sect	 a) ☐ All b) ☐ Some* c) ☐ None of the: 1. ☐ Certified copies of the priority documents had 2. ☐ Certified copies of the priority documents had 	ave been received. ave been received in Application	on No
* Certified copies not received: Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) ☐ hereto or 2) ☐ to Paper No./Mail Date (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. ☑ Notice of References Cited (PTO-892) 2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948) 3. ☑ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date 177/03 4. ☐ Examiner's Comment Regarding Requirement for Deposit **Examiner's Statement of Reasons for Allowance**			10 m and 112 m and 12
noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) ☐ hereto or 2) ☐ to Paper No./Mail Date (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. ☑ Notice of References Cited (PTO-892) 2. ☐ Notice of Praftperson's Patent Drawing Review (PTO-948) 3. ☑ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date 177/03 4. ☐ Examiner's Comment Regarding Requirement for Deposit 8. ☑ Examiner's Statement of Reasons for Allowance	, , , , , , , , , , , , , , , , , , , ,		
INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. 6. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 7. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. Notice of References Cited (PTO-892) 2. Notice of Draftperson's Patent Drawing Review (PTO-948) 3. Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date 1277/04. 7. Examiner's Amendment/Comment Paper No./Mail Date 777/03 4. Examiner's Comment Regarding Requirement for Deposit 8. Examiner's Statement of Reasons for Allowance	noted below. Failure to timely comply will result in ABANDOI		e a reply complying with the requirements
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) ☐ hereto or 2) ☐ to Paper No./Mail Date (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. ☑ Notice of References Cited (PTO-892) 2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948) 3. ☑ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date 127/704. 7. ☑ Examiner's Amendment/Comment Paper No./Mail Date 7/7/03 4. ☐ Examiner's Comment Regarding Requirement for Deposit 8. ☑ Examiner's Statement of Reasons for Allowance	5. A SUBSTITUTE OATH OR DECLARATION must be sul INFORMAL PATENT APPLICATION (PTO-152) which (bmitted. Note the attached EX gives reason(s) why the oath o	AMINER'S AMENDMENT or NOTICE OF or declaration is deficient.
1) ☐ hereto or 2) ☐ to Paper No./Mail Date (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. ☑ Notice of References Cited (PTO-892) 2. ☐ Notice of Paftperson's Patent Drawing Review (PTO-948) 3. ☑ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date 12/7/04 7. ☑ Examiner's Amendment/Comment Paper No./Mail Date 7/7/03 4. ☐ Examiner's Comment Regarding Requirement for Deposit 8. ☑ Examiner's Statement of Reasons for Allowance	6. CORRECTED DRAWINGS (as "replacement sheets") r	nust be submitted.	
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. ☑ Notice of References Cited (PTO-892) 2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948) 3. ☑ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date 127/04. 3. ☑ Examiner's Comment Regarding Requirement for Deposit 8. ☑ Examiner's Statement of Reasons for Allowance	(a) \square including changes required by the Notice of Draftsp	erson's Patent Drawing Revie	w (PTO-948) attached
Paper No./Mail Date Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 7. □ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. ☑ Notice of References Cited (PTO-892) 2. □ Notice of Draftperson's Patent Drawing Review (PTO-948) 3. ☑ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date 12/7/04 4. □ Examiner's Comment Regarding Requirement for Deposit 8. ☑ Examiner's Statement of Reasons for Allowance	1) 🗌 hereto or 2) 📗 to Paper No./Mail Date	 ·	,
each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 7. □ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. ☑ Notice of References Cited (PTO-892) 2. □ Notice of Draftperson's Patent Drawing Review (PTO-948) 3. ☑ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date 12/7/03 4. □ Examiner's Comment Regarding Requirement for Deposit 8. ☑ Examiner's Statement of Reasons for Allowance		er's Amendment / Comment o	r in the Office action of
Attachment(s) 1. ☑ Notice of References Cited (PTO-892) 2. ☑ Notice of Draftperson's Patent Drawing Review (PTO-948) 3. ☑ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date 7/7/03 4. ☐ Examiner's Comment Regarding Requirement for Deposit Attachment(s) 5. ☐ Notice of Informal Patent Application (PTO-152) 6. ☑ Interview Summary (PTO-413), Paper No./Mail Date 12/7/04. 7. ☑ Examiner's Amendment/Comment 8. ☑ Examiner's Statement of Reasons for Allowance	Identifying indicia such as the application number (see 37 CFI each sheet. Replacement sheet(s) should be labeled as such	R 1.84(c)) should be written on the header according to 37 C	the drawings in the front (not the back) of FR 1.121(d).
 Notice of References Cited (PTO-892) Notice of Informal Patent Application (PTO-152) Notice of Draftperson's Patent Drawing Review (PTO-948) Interview Summary (PTO-413), Paper No./Mail Date 12/7/04. Examiner's Amendment/Comment Paper No./Mail Date 7/7/03 Examiner's Comment Regarding Requirement for Deposit Examiner's Statement of Reasons for Allowance 	 DEPOSIT OF and/or INFORMATION about the de- attached Examiner's comment regarding REQUIREMEN 	POSIT OF BIOLOGICAL MAT NT FOR THE DEPOSIT OF BI	ERIAL must be submitted. Note the OLOGICAL MATERIAL.
 Notice of Draftperson's Patent Drawing Review (PTO-948) Interview Summary (PTO-413), Paper No./Mail Date 12/7/04 Examiner's Amendment/Comment Paper No./Mail Date 7/7/03 Examiner's Comment Regarding Requirement for Deposit Examiner's Statement of Reasons for Allowance 		5. ☐ Notice of I	oformal Patent Application (PTO-152)
Paper No./Mail Date 12/7/04. 3. 🗵 Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date 7/7/03 4. 🗆 Examiner's Comment Regarding Requirement for Deposit Paper No./Mail Date 12/7/04. 7. 🖾 Examiner's Amendment/Comment 8. 🖾 Examiner's Statement of Reasons for Allowance	, ,		
4. ☐ Examiner's Comment Regarding Requirement for Deposit 8. ☒ Examiner's Statement of Reasons for Allowance	3. ⊠ Information Disclosure Statements (PTO-1449 or PTO/SI	Paper No.	Paper No./Mail Date <u>12/7/04</u> .
of Biological Material		it 8. ⊠ Examiner's	Statement of Reasons for Allowance
o. D. Guidi.	of Biological Material	9. 🔲 Other	<u>_</u> .
		•	

Art Unit: 2813

This action is in response to the application filed 7/7/03.

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with John P. Taylor on 12/07/04.

The application has been amended as follows:

In Claim 16 line 10delete - - , b - - after "layer" and before ";"

Cancel claims 17-47.

Reasons for Allowance

- 2. Claims 1-16 are allowed.
- 3. The following is an examiner's statement of reasons for allowance:

Claims 1 and 16 contain the limitation for planarizing an integrated circuit structure where a portion of copper is removed by chemical mechanical polishing (CMP), the

remainder of copper over the barrier layer is removed by electropolishing, and the barrier layer is then removed by a dry etch while inhibiting dishing and/or erosion of the copper filler material in the openings in a dielectric layer. This limitation, in combination with the other limitations of claims 1 and 16 is not taught or suggested by the prior art of record. Chung (US006395607B1) teaches combinations of CMP and electropolishing to remove copper, but rather than planarizing, Chung uses these methods to produce a recess in the structure and then removes the barrier layer by CMP or electropolishing to achieve a planar structure. Hill (US006753250B1) teaches removing a portion of the copper by electropolishing and the rest by CMP, the sequence of process methods opposite that of the instant application. Reid (US006653226B1) teaches replacing CMP with electropolishing with advantages of cost savings, higher processing rates, and easier endpoint detection, but does not teach or suggest a combination of CMP followed by electropolishing. Cox (US006383917B1) and ZHU (US006402592B1) also teach replacing CMP with electropolishing but do not teach or suggest a combination of CMP followed by electropolishing.

Page 3

Claims 2-15 are allowed as being properly dependent upon allowed claim 1.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

4. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to David S. Blum whose telephone number is (571)-272-

1687) and e-mail address is David.blum@USPTO.gov.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Carl Whitehead Jr., can be reached at (571)-272-1702. Our facsimile

number all patent correspondence to be entered into an application is (703) 872-9306.

The facsimile number for customer service is (703)-872-9317.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

David S. Blum

December 7, 2004